

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013623**Date Inspected:** 17-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 7AW+7BW hold back welds and segment splice. The weld designations reviewed are as follows:

1. SP429-001, 023, 024, 027, 028
2. SP430-001, 013, 014, 017, 018
3. SP097-001-025, 026, 033, 034
4. SP098-001-013, 014, 017, 018
5. SP124-001-025, 026, 033, 034
6. SP125-001-001, 002, 009, 010
7. SP152-001-005, 006
8. SP151-001-029, 030
9. EP057-001- 009, 010
10. EP058-001-005, 006
11. DP638-001-015, 016

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- 12. DP638-001-009, 010
- 13. BP089-001-025, 029
- 14. BP090-001-047, 043
- 15. BP035-001-026, 036
- 16. BP036-001-032, 042
- 17. BP143-001-031, 032
- 18. BP144-001-07, 038

8BW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 0004 located at CA049 counter weight side of segment. Welder is identified as Mr. Yin Xiaokai (050232). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1387 repair procedure.

Y Location of repairs areas by above noted welder (050232) is located at 13060 and 12930mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 047 located at CA049 counter weight side of segment. Welder is identified as Mr. Hu Yacheng (049339). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1387 repair procedure.

Y Location of repairs areas by above noted welder (049339) is located at 4230~4330mm.

7CW+7BW

Shield Metal Arc Welding (SMAW) VT repair welding was performed on bottom plate t stiffeners of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

7BW

Flux Core Arc Welding (FCAW) repair welding was performed on weld joints 024, 001, 022 and 052 located at SEG035C cross beam side of segment. Welder is identified as Mr. Bi Laishu (045280). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-FCAW-3G (3F)-F-1, WPS-B-T-2233-Tc-U4b-F and WR12045 repair procedure.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

8CE

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1. Grit blasting of 7BE+7CE weld splice. (Internal)

2. UT reject excavations on the EP+DP weld joint located at Y locations 16845~16640mm, 16380mm, 14,845mm and 14325mm bike path side of segment.

7EE

1. UT reject excavations on the EP+DP weld joint located at Y location 2350mm cross beam side of segment.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
